

RAW SEQUENCE LISTING

**The Biotechnology Systems Branch of the Scientific and Technical
Information Center (STIC) no errors detected.**

Application Serial Number: 10/531,427
Source: 1FWP
Date Processed by STIC: 8/4/06

ENTERED



IFWP

RAW SEQUENCE LISTING

DATE: 08/04/2006

PATENT APPLICATION: US/10/531,427

TIME: 13:11:47

Input Set : A:\2005-11-10 0020-5363PUS1.txt

Output Set: N:\CRF4\08042006\J531427.raw

```

3 <110> APPLICANT: MIYATA, Toshiyuki
4      KOKAME, Koichi
6 <120> TITLE OF INVENTION: SUBSTRATES SPECIFIC TO VON WILLEBRAND FACTOR CLEAVING
PROTEASE AND METHOD
7      OF ASSAYING THE ACTIVITY
9 <130> FILE REFERENCE: 0020-5363PUS1
11 <140> CURRENT APPLICATION NUMBER: US 10/531,427
12 <141> CURRENT FILING DATE: 2005-04-15
14 <150> PRIOR APPLICATION NUMBER: PCT/JP02/10816
15 <151> PRIOR FILING DATE: 2002-10-18
17 <160> NUMBER OF SEQ ID NOS: 12
19 <210> SEQ ID NO: 1
20 <211> LENGTH: 2813
21 <212> TYPE: PRT
22 <213> ORGANISM: Homo sapiens
24 <400> SEQUENCE: 1
25 Met Ile Pro Ala Arg Phe Ala Gly Val Leu Leu Ala Leu Ala Leu Ile
26   1             5             10             15
27 Leu Pro Gly Thr Leu Cys Ala Glu Gly Thr Arg Gly Arg Ser Ser Thr
28             20             25             30
29 Ala Arg Cys Ser Leu Phe Gly Ser Asp Phe Val Asn Thr Phe Asp Gly
30             35             40             45
31 Ser Met Tyr Ser Phe Ala Gly Tyr Cys Ser Tyr Leu Leu Ala Gly Gly
32             50             55             60
33 Cys Gln Lys Arg Ser Phe Ile Ile Gly Asp Phe Gln Asn Gly Lys
34             65             70             75             80
35 Arg Val Ser Leu Ser Val Tyr Leu Gly Glu Phe Phe Asp Ile His Leu
36             85             90             95
37 Phe Val Asn Gly Thr Val Thr Gln Gly Asp Gln Arg Val Ser Met Pro
38             100            105            110
39 Tyr Ala Ser Lys Gly Leu Tyr Leu Glu Thr Glu Ala Gly Tyr Tyr Lys
40             115            120            125
41 Leu Ser Gly Glu Ala Tyr Gly Phe Val Ala Arg Ile Asp Gly Ser Gly
42             130            135            140
43 Asn Phe Gln Val Leu Leu Ser Asp Arg Tyr Phe Asn Lys Thr Cys Gly
44             145            150            155            160
45 Leu Cys Gly Asn Phe Asn Ile Phe Ala Glu Asp Asp Phe Met Thr Gln
46             165            170            175
47 Glu Gly Thr Leu Thr Ser Asp Pro Tyr Asp Phe Ala Asn Ser Trp Ala
48             180            185            190
49 Leu Ser Ser Gly Glu Gln Trp Cys Glu Arg Ala Ser Pro Pro Ser Ser
50             195            200            205
51 Ser Cys Asn Ile Ser Ser Gly Glu Met Gln Lys Gly Leu Trp Glu Gln
52             210            215            220

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```

53 Cys Gln Leu Leu Lys Ser Thr Ser Val Phe Ala Arg Cys His Pro Leu
54 225                230                235                240
55 Val Asp Pro Glu Pro Phe Val Ala Leu Cys Glu Lys Thr Leu Cys Glu
56                245                250                255
57 Cys Ala Gly Gly Leu Glu Cys Ala Cys Pro Ala Leu Leu Glu Tyr Ala
58                260                265                270
59 Arg Thr Cys Ala Gln Glu Gly Met Val Leu Tyr Gly Trp Thr Asp His
60                275                280                285
61 Ser Ala Cys Ser Pro Val Cys Pro Ala Gly Met Glu Tyr Arg Gln Cys
62                290                295                300
63 Val Ser Pro Cys Ala Arg Thr Cys Gln Ser Leu His Ile Asn Glu Met
64 305                310                315                320
65 Cys Gln Glu Arg Cys Val Asp Gly Cys Ser Cys Pro Glu Gly Gln Leu
66                325                330                335
67 Leu Asp Glu Gly Leu Cys Val Glu Ser Thr Glu Cys Pro Cys Val His
68                340                345                350
69 Ser Gly Lys Arg Tyr Pro Pro Gly Thr Ser Leu Ser Arg Asp Cys Asn
70                355                360                365
71 Thr Cys Ile Cys Arg Asn Ser Gln Trp Ile Cys Ser Asn Glu Glu Cys
72                370                375                380
73 Pro Gly Glu Cys Leu Val Thr Gly Gln Ser His Phe Lys Ser Phe Asp
74 385                390                395                400
75 Asn Arg Tyr Phe Thr Phe Ser Gly Ile Cys Gln Tyr Leu Leu Ala Arg
76                405                410                415
77 Asp Cys Gln Asp His Ser Phe Ser Ile Val Ile Glu Thr Val Gln Cys
78                420                425                430
79 Ala Asp Asp Arg Asp Ala Val Cys Thr Arg Ser Val Thr Val Arg Leu
80                435                440                445
81 Pro Gly Leu His Asn Ser Leu Val Lys Leu Lys His Gly Ala Gly Val
82                450                455                460
83 Ala Met Asp Gly Gln Asp Val Gln Leu Pro Leu Leu Lys Gly Asp Leu
84 465                470                475                480
85 Arg Ile Gln His Thr Val Thr Ala Ser Val Arg Leu Ser Tyr Gly Glu
86                485                490                495
87 Asp Leu Gln Met Asp Trp Asp Gly Arg Gly Arg Leu Leu Val Lys Leu
88                500                505                510
89 Ser Pro Val Tyr Ala Gly Lys Thr Cys Gly Leu Cys Gly Asn Tyr Asn
90                515                520                525
91 Gly Asn Gln Gly Asp Asp Phe Leu Thr Pro Ser Gly Leu Ala Glu Pro
92                530                535                540
93 Arg Val Glu Asp Phe Gly Asn Ala Trp Lys Leu His Gly Asp Cys Gln
94 545                550                555                560
95 Asp Leu Gln Lys Gln His Ser Asp Pro Cys Ala Leu Asn Pro Arg Met
96                565                570                575
97 Thr Arg Phe Ser Glu Glu Ala Cys Ala Val Leu Thr Ser Pro Thr Phe
98                580                585                590
99 Glu Ala Cys His Arg Ala Val Ser Pro Leu Pro Tyr Leu Arg Asn Cys
100                595                600                605
101 Arg Tyr Asp Val Cys Ser Cys Ser Asp Gly Arg Glu Cys Leu Cys Gly

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```

102      610      615      620
103 Ala Leu Ala Ser Tyr Ala Ala Ala Cys Ala Gly Arg Gly Val Arg Val
104 625      630      635      640
105 Ala Trp Arg Glu Pro Gly Arg Cys Glu Leu Asn Cys Pro Lys Gly Gln
106      645      650      655
107 Val Tyr Leu Gln Cys Gly Thr Pro Cys Asn Leu Thr Cys Arg Ser Leu
108      660      665      670
109 Ser Tyr Pro Asp Glu Glu Cys Asn Glu Ala Cys Leu Glu Gly Cys Phe
110      675      680      685
111 Cys Pro Pro Gly Leu Tyr Met Asp Glu Arg Gly Asp Cys Val Pro Lys
112      690      695      700
113 Ala Gln Cys Pro Cys Tyr Tyr Asp Gly Glu Ile Phe Gln Pro Glu Asp
114 705      710      715      720
115 Ile Phe Ser Asp His His Thr Met Cys Tyr Cys Glu Asp Gly Phe Met
116      725      730      735
117 His Cys Thr Met Ser Gly Val Pro Gly Ser Leu Leu Pro Asp Ala Val
118      740      745      750
119 Leu Ser Ser Pro Leu Ser His Arg Ser Lys Arg Ser Leu Ser Cys Arg
120      755      760      765
121 Pro Pro Met Val Lys Leu Val Cys Pro Ala Asp Asn Leu Arg Ala Glu
122      770      775      780
123 Gly Leu Glu Cys Thr Lys Thr Cys Gln Asn Tyr Asp Leu Glu Cys Met
124 785      790      795      800
125 Ser Met Gly Cys Val Ser Gly Cys Leu Cys Pro Pro Gly Met Val Arg
126      805      810      815
127 His Glu Asn Arg Cys Val Ala Leu Glu Arg Cys Pro Cys Phe His Gln
128      820      825      830
129 Gly Lys Glu Tyr Ala Pro Gly Glu Thr Val Lys Ile Gly Cys Asn Thr
130      835      840      845
131 Cys Val Cys Arg Asp Arg Lys Trp Asn Cys Thr Asp His Val Cys Asp
132      850      855      860
133 Ala Thr Cys Ser Thr Ile Gly Met Ala His Tyr Leu Thr Phe Asp Gly
134 865      870      875      880
135 Leu Lys Tyr Leu Phe Pro Gly Glu Cys Gln Tyr Val Leu Val Gln Asp
136      885      890      895
137 Tyr Cys Gly Ser Asn Pro Gly Thr Phe Arg Ile Leu Val Gly Asn Lys
138      900      905      910
139 Gly Cys Ser His Pro Ser Val Lys Cys Lys Lys Arg Val Thr Ile Leu
140      915      920      925
141 Val Glu Gly Gly Glu Ile Glu Leu Phe Asp Gly Glu Val Asn Val Lys
142      930      935      940
143 Arg Pro Met Lys Asp Glu Thr His Phe Glu Val Val Glu Ser Gly Arg
144 945      950      955      960
145 Tyr Ile Ile Leu Leu Leu Gly Lys Ala Leu Ser Val Val Trp Asp Arg
146      965      970      975
147 His Leu Ser Ile Ser Val Val Leu Lys Gln Thr Tyr Gln Glu Lys Val
148      980      985      990
149 Cys Gly Leu Cys Gly Asn Phe Asp Gly Ile Gln Asn Asn Asp Leu Thr
150      995      1000      1005

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```

151 Ser Ser Asn Leu Gln Val Glu Glu Asp Pro Val Asp Phe Gly Asn Ser
152      1010                      1015                      1020
153 Trp Lys Val Ser Ser Gln Cys Ala Asp Thr Arg Lys Val Pro Leu Asp
154 1025                      1030                      1035                      1040
155 Ser Ser Pro Ala Thr Cys His Asn Asn Ile Met Lys Gln Thr Met Val
156                      1045                      1050                      1055
157 Asp Ser Ser Cys Arg Ile Leu Thr Ser Asp Val Phe Gln Asp Cys Asn
158                      1060                      1065                      1070
159 Lys Leu Val Asp Pro Glu Pro Tyr Leu Asp Val Cys Ile Tyr Asp Thr
160                      1075                      1080                      1085
161 Cys Ser Cys Glu Ser Ile Gly Asp Cys Ala Cys Phe Cys Asp Thr Ile
162      1090                      1095                      1100
163 Ala Ala Tyr Ala His Val Cys Ala Gln His Gly Lys Val Val Thr Trp
164 1105                      1110                      1115                      1120
165 Arg Thr Ala Thr Leu Cys Pro Gln Ser Cys Glu Glu Arg Asn Leu Arg
166                      1125                      1130                      1135
167 Glu Asn Gly Tyr Glu Cys Glu Trp Arg Tyr Asn Ser Cys Ala Pro Ala
168                      1140                      1145                      1150
169 Cys Gln Val Thr Cys Gln His Pro Glu Pro Leu Ala Cys Pro Val Gln
170                      1155                      1160                      1165
171 Cys Val Glu Gly Cys His Ala His Cys Pro Pro Gly Lys Ile Leu Asp
172      1170                      1175                      1180
173 Glu Leu Leu Gln Thr Cys Val Asp Pro Glu Asp Cys Pro Val Cys Glu
174 1185                      1190                      1195                      1200
175 Val Ala Gly Arg Arg Phe Ala Ser Gly Lys Lys Val Thr Leu Asn Pro
176                      1205                      1210                      1215
177 Ser Asp Pro Glu His Cys Gln Ile Cys His Cys Asp Val Val Asn Leu
178                      1220                      1225                      1230
179 Thr Cys Glu Ala Cys Gln Glu Pro Gly Gly Leu Val Val Pro Pro Thr
180      1235                      1240                      1245
181 Asp Ala Pro Val Ser Pro Thr Thr Leu Tyr Val Glu Asp Ile Ser Glu
182      1250                      1255                      1260
183 Pro Pro Leu His Asp Phe Tyr Cys Ser Arg Leu Leu Asp Leu Val Phe
184 1265                      1270                      1275                      1280
185 Leu Leu Asp Gly Ser Ser Arg Leu Ser Glu Ala Glu Phe Glu Val Leu
186                      1285                      1290                      1295
187 Lys Ala Phe Val Val Asp Met Met Glu Arg Leu Arg Ile Ser Gln Lys
188                      1300                      1305                      1310
189 Trp Val Arg Val Ala Val Val Glu Tyr His Asp Gly Ser His Ala Tyr
190      1315                      1320                      1325
191 Ile Gly Leu Lys Asp Arg Lys Arg Pro Ser Glu Leu Arg Arg Ile Ala
192      1330                      1335                      1340
193 Ser Gln Val Lys Tyr Ala Gly Ser Gln Val Ala Ser Thr Ser Glu Val
194 1345                      1350                      1355                      1360
195 Leu Lys Tyr Thr Leu Phe Gln Ile Phe Ser Lys Ile Asp Arg Pro Glu
196                      1365                      1370                      1375
197 Ala Ser Arg Ile Ala Leu Leu Leu Met Ala Ser Gln Glu Pro Gln Arg
198                      1380                      1385                      1390
199 Met Ser Arg Asn Phe Val Arg Tyr Val Gln Gly Leu Lys Lys Lys Lys

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```

200      1395      1400      1405
201 Val Ile Val Ile Pro Val Gly Ile Gly Pro His Ala Asn Leu Lys Gln
202      1410      1415      1420
203 Ile Arg Leu Ile Glu Lys Gln Ala Pro Glu Asn Lys Ala Phe Val Leu
204 1425      1430      1435      1440
205 Ser Ser Val Asp Glu Leu Glu Gln Gln Arg Asp Glu Ile Val Ser Tyr
206      1445      1450      1455
207 Leu Cys Asp Leu Ala Pro Glu Ala Pro Pro Pro Thr Leu Pro Pro His
208      1460      1465      1470
209 Met Ala Gln Val Thr Val Gly Pro Gly Leu Leu Gly Val Ser Thr Leu
210      1475      1480      1485
211 Gly Pro Lys Arg Asn Ser Met Val Leu Asp Val Ala Phe Val Leu Glu
212      1490      1495      1500
213 Gly Ser Asp Lys Ile Gly Glu Ala Asp Phe Asn Arg Ser Lys Glu Phe
214 1505      1510      1515      1520
215 Met Glu Glu Val Ile Gln Arg Met Asp Val Gly Gln Asp Ser Ile His
216      1525      1530      1535
217 Val Thr Val Leu Gln Tyr Ser Tyr Met Val Thr Val Glu Tyr Pro Phe
218      1540      1545      1550
219 Ser Glu Ala Gln Ser Lys Gly Asp Ile Leu Gln Arg Val Arg Glu Ile
220      1555      1560      1565
221 Arg Tyr Gln Gly Gly Asn Arg Thr Asn Thr Gly Leu Ala Leu Arg Tyr
222      1570      1575      1580
223 Leu Ser Asp His Ser Phe Leu Val Ser Gln Gly Asp Arg Glu Gln Ala
224 1585      1590      1595      1600
225 Pro Asn Leu Val Tyr Met Val Thr Gly Asn Pro Ala Ser Asp Glu Ile
226      1605      1610      1615
227 Lys Arg Leu Pro Gly Asp Ile Gln Val Val Pro Ile Gly Val Gly Pro
228      1620      1625      1630
229 Asn Ala Asn Val Gln Glu Leu Glu Arg Ile Gly Trp Pro Asn Ala Pro
230      1635      1640      1645
231 Ile Leu Ile Gln Asp Phe Glu Thr Leu Pro Arg Glu Ala Pro Asp Leu
232      1650      1655      1660
233 Val Leu Gln Arg Cys Cys Ser Gly Glu Gly Leu Gln Ile Pro Thr Leu
234 1665      1670      1675      1680
235 Ser Pro Ala Pro Asp Cys Ser Gln Pro Leu Asp Val Ile Leu Leu Leu
236      1685      1690      1695
237 Asp Gly Ser Ser Ser Phe Pro Ala Ser Tyr Phe Asp Glu Met Lys Ser
238      1700      1705      1710
239 Phe Ala Lys Ala Phe Ile Ser Lys Ala Asn Ile Gly Pro Arg Leu Thr
240      1715      1720      1725
241 Gln Val Ser Val Leu Gln Tyr Gly Ser Ile Thr Thr Ile Asp Val Pro
242      1730      1735      1740
243 Trp Asn Val Val Pro Glu Lys Ala His Leu Leu Ser Leu Val Asp Val
244 1745      1750      1755      1760
245 Met Gln Arg Glu Gly Gly Pro Ser Gln Ile Gly Asp Ala Leu Gly Phe
246      1765      1770      1775
247 Ala Val Arg Tyr Leu Thr Ser Glu Met His Gly Ala Arg Pro Gly Ala
248      1780      1785      1790

```

RAW SEQUENCE LISTING ERROR SUMMARY

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Invalid Line Length:**The rules require that a line not exceed 72 characters in length. This includes spaces.**

Seq#:1; Line(s) 6
Seq#:7; Line(s) 493
Seq#:8; Line(s) 504
Seq#:9; Line(s) 515
Seq#:10; Line(s) 526
Seq#:11; Line(s) 537
Seq#:12; Line(s) 548

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